

ADDENDUM TO THE FACT SHEET
FOR THE 2008 REAUTHORIZATION
FOR STATE WASTE DISCHARGE
PERMIT NO. ST 6164

I. GENERAL INFORMATION

Table 1: General information

Applicant	Kemira Chemicals, Inc.
Facility Name and Address	Kemira Chemicals, Inc. 1150 South 35 th Street Washougal, Washington 98671
Type of Facility:	Producer of chemicals for the pulp and paper industries
Standard Industrial Classification (SIC) Codes(s)	2899 2819
Product Types	Defoamers, strength additives, surface additives, felt washers, brightness enhancers, deinkers, and sodium aluminate.
Facility Discharge Location	Latitude: 45° 33' 56" N Longitude: 122° 19' 57" W
Receiving Water:	Outfall 001: Columbia River through the City of Washougal Publicly Owned Treatment Works (POTW)
Water Body I.D. No.	Columbia River: NN57SG
Contact at Facility	Name: Brad K. Stephens Telephone #: 360-835-8725
Responsible Official	Name: Brad Stephens Title: Operations Manager Address: 1150 South 35 th Street Washougal, Washington 98671 Telephone #: 360-835-8725 FAX #: 360-835-8729

II. APPLICATION REVIEW

An application for permit reissuance was submitted to the Department of Ecology (Ecology) on November 28, 2007, and accepted by Ecology on December 11, 2007. The scope and manner of any review of an application for replacement of permit by Ecology shall be sufficiently detailed as to insure the following:

- That the Permittee is in substantial compliance with all of the terms, conditions, requirements and schedules of compliance of the expired permit;

- That Ecology has up-to date information on the Permittee's production levels; Permittee's waste treatment practices; nature, content, and frequencies of Permittee's discharge; either pursuant to the submission of new forms and applications or pursuant to monitoring records and reports resubmitted to the Department by the Permittee; and
- That the discharge is consistent with applicable effluent standards and limitations, water quality standards, and other legally applicable requirements listed in Washington Administrative Code (WAC) 173-216 and WAC 173-200.

The application for Kemira was reviewed and indicates that no changes in the treatment characteristics of the effluent process or volume of wastewater has occurred other than Silica I and Silica II processes are presently idled. Kemira wants both processes permitted at 50 percent of capacity each. This results in the maximum daily flow reduction from 148,000 gallons per day (gpd) to 84,000 gpd. Kemira will notify Ecology on a discharge monitoring report (DMR) whenever Silica I and/or II processes are restarted.

Kemira requested the priority pollutant testing reduction from once a year to once every two years. January 2007 test did not detect any priority pollutants except arsenic, chromium, copper, lead, mercury, nickel, and zinc. The detected metals were still well below the city of Washougal local limits. Also, none of the parameters being tested for are listed on raw material MSDSs used on-site. Ecology will reduce the priority pollutant testing according to the request.

Kemira sent updated plant information which was attached in Appendix B.

III. PERMIT REAUTHORIZATION

This fact sheet addendum accompanies the draft permit, which is to be reauthorized to Kemira for the discharge of wastewater to the city of Washougal POTW. The previous fact sheet is also part of this administrative record and explains the basis for the discharge limitations and conditions of the reauthorized permit.

The existing permit requirements, including discharge limitations and monitoring, other than mentioned already above flow, do not need to be changed to protect the receiving water quality. The previous fact sheet addressed conditions and issues at the facility at the time when the previous permit was issued, and statements made reflected the status in 2006. Since the issuance of the current permit, Ecology has not received any information which indicates that environmental impacts from the discharge that were not evaluated at the time of the last permit issuance is persuasive enough to undertake a complete renewal of the permit. The reauthorized permit is virtually identical to the previous permit issued on September 15, 2006.

Assessment of compliance and inspections of the facility during the previous permit term indicate that the facility should not be placed on a high priority for permit renewal. Ecology assigns a high priority for permit renewals in situations where water quality would materially benefit from a more stringent permit during the next five-year cycle.

The permit reauthorization process, in concert with the routine renewal of high priority permits, allows Ecology to reissue permits in a timely manner and minimize the number of active permits that have passed expiration dates. A system of ranking the relative significance of the

environmental benefit to be gained by renewing a permit rather than reauthorizing a permit is followed during Ecology's annual permit planning process. Each permit that is due for reissuance is assessed and compared with other permits that are also due for reissuance. The public is notified and input is sought after the initial draft ranking has tentatively established which permits are likely to be completely renewed and which are likely to be reauthorized. All relevant comments and suggestions are considered before a final decision is made regarding the type of reissuance for each permit.

The only changes to the previous permit are the submittal date requirements, flow limit and frequency of the priority pollutant testing. Submittal requirements from the previous permit that were completed and submitted and do not require additional or continued assessment were removed from this permit. The submittal dates for the other standard compliance and submittal requirements that have been carried over from the past permit into this reauthorized permit have been adjusted to the proposed permit schedule. Ecology considered these submittals necessary in the previous permit and no information has come forward to cause a reconsideration of the submittal requirement.

Public Notice of Application was published on June 19, 2006, and June 26, 2006, in the *Columbian*.

IV. RECOMMENDATION FOR PERMIT ISSUANCE

Ecology proposes that this permit be issued for five years.

APPENDIX A – PUBLIC INVOLVEMENT INFORMATION

The Department has determined to reauthorize a discharge permit to the applicant listed on page 1 of this fact sheet addendum. The permit contains conditions and effluent limitations that are described in the fact sheet.

Public notice of application was published on June 19, 2006, and June 26, 2006, in the *Columbian* to inform the public that an application had been submitted and to invite comment on the reauthorization of this permit.

Sherri Greenup
Industrial Unit Permit Coordinator
Department of Ecology
Southwest Regional Office
P.O. Box 47775
Olympia, Washington 98504-7775

Further information may be obtained from Ecology by telephone at 360-407-6280, or by writing to the address listed above.

APPENDIX B – UPDATED PLANT INFORMATION

The following is updated plant information provided by Kemira:

DESCRIPTION OF THE FACILITY

Kemira Chemicals, Inc. ('Kemira,' formerly Vinings Industries, Inc., of Kennesaw, Georgia) produces specialty chemicals for the pulp and paper industry. Standard Industrial Codes for the activities are 2899 and 2819. Primarily one production unit (Paper) is involved which routinely generates wastewater. Two recently idled units (Silica I and Silica II) are currently not discharging wastewater, but have volume assigned to them for rainwater and also wastewater should these units restart.

HISTORY

The Washougal plant began operation in 1989. Kemira had expanded several times until the organics process was shutdown in 2006. The two silica units were idled in 2007. Workforce changes have been made with the site now running a day shift five days a week with about 13 employees.

INDUSTRIAL PROCESSES

1. Silica I process.

The Silica I process is currently idled, but could restart with little difficulty. The process consists of ion exchange resin beads that are used to strip sodium off of sodium silicate, leaving just silica behind. The silica is further processed into a finished product. The resin beads stay in the reactors, but must be regenerated with dilute sulfuric acid between reactions. A dilute solution of sodium sulfate and excess sulfuric acid is pH neutralized and discharged to the POTW. In addition, rainwater from about 9,300 square feet of containment area is collected and sent to this same system.

2. Silica II process.

The Silica II process is currently idled, but could restart with little difficulty. The process consists of ion exchange resin beads that are used to strip sodium off of sodium silicate, leaving just silica behind. The silica is further processed into a finished product. The resin beads stay in the reactors, but must be regenerated with dilute sulfuric acid between reactions. A dilute solution of sodium sulfate and excess sulfuric acid is pH neutralized and discharged to the POTW. In addition, rainwater from about 2,000 square feet of containment area is collected and sent to this same system.

Table 2: Raw Materials

Material	Amount, lbs/yr.
surfactants	3,900,000
polyacrylamides	2,800,000
fatty acid	1,400,000
chelant	1,300,000
wax	1,250,000

Material	Amount, lbs/yr.
miscellaneous	1,300,000

Products: 2007 annualized production by product type was estimated as follows in the fact sheet in Table 3.

Table 3: 2007 annualized production

Product Type	Amount, lbs/yr.
sizing	10,300,000
strength	8,400,000
deinkers	4,700,000
defoamers	3,100,000
felt condition/cleaner	2,500,000
miscellaneous	3,900,000

Kemira does not produce non-skids and colloidal silicas any more.

NON-CONTACT COOLING WATER DISCHARGES:

- All discharges of non-contact cooling water to surface water have been eliminated.
- A glycol/water close loop cooling system at the Sizing operation was observed during the inspection on April 1, 2008. Kemira operates glycol/water close loop cooling systems in other parts of the plant.

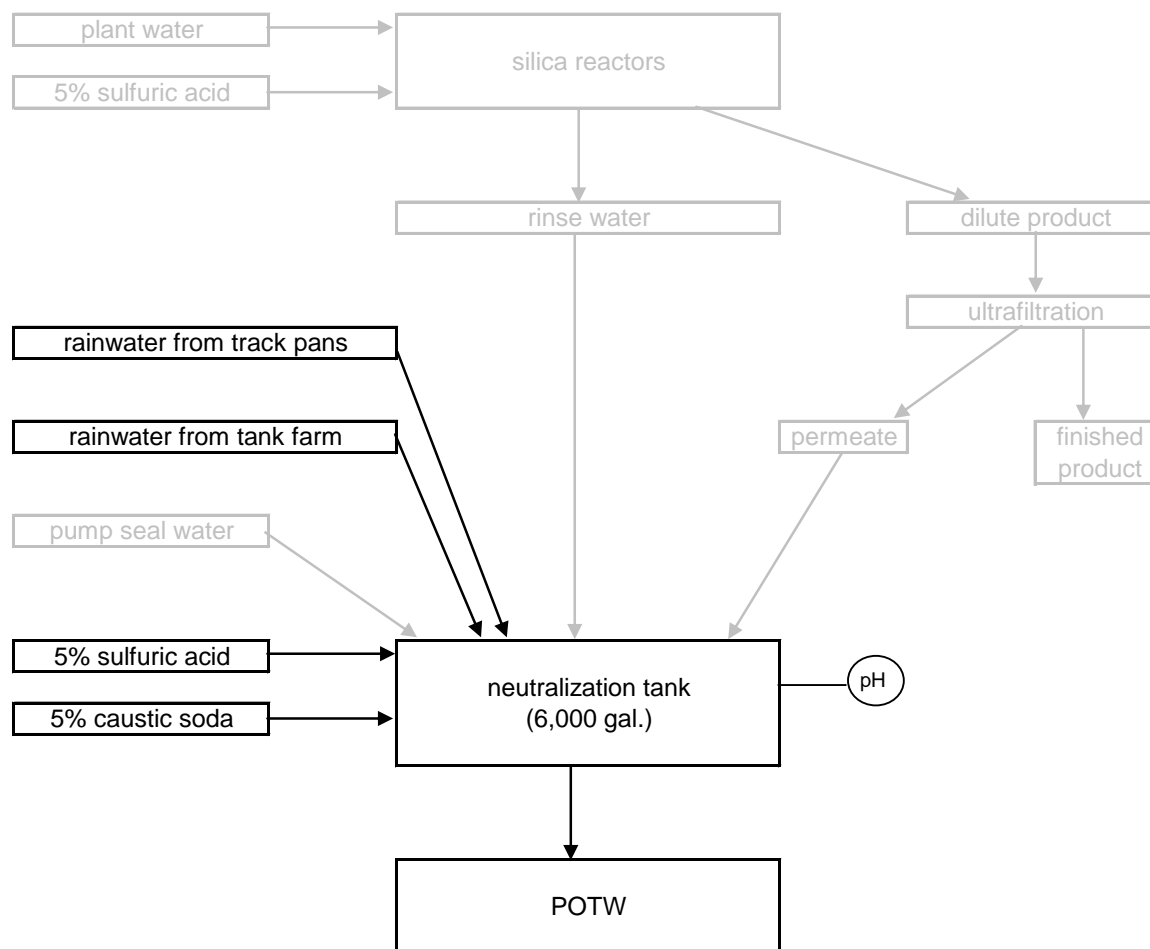
Silica I Wastewater flow diagram

Production process:

The silica process formerly operating in this unit has been idled, and is indicated in gray, below. Rainwater from about 8,000 square feet of functioning tank farm and about 1,300 square feet of rail track pans is collected in the neutralization tank.

Wastewater treatment process:

Only clear, odorless liquid from the tank farms and track pans is allowed into the neutralization tank. If other than clear or odorless, the rainwater goes to the clarifiers located in the Paper plant. The collected rainwater is also check for pH, with adjustments made prior to discharge. This occurs in a batch fashion. Needed data is recorded for each discharge on a log sheet.



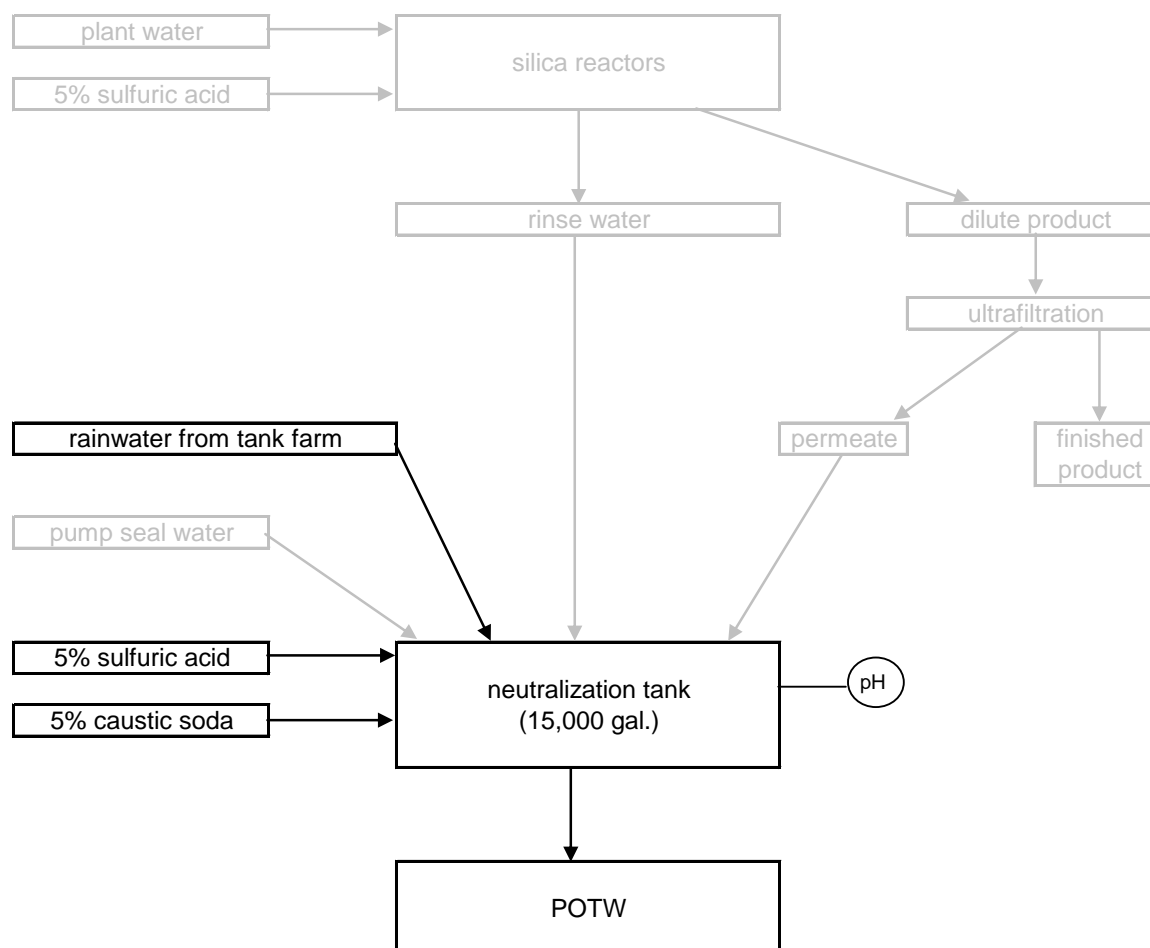
Silica II Wastewater flow diagram

Production process:

The silica process formerly operating in this unit has been idled, and is indicated in gray, below. Rainwater from about 2,000 square feet of tank farm and loading rack is collected in the neutralization tank.

Wastewater treatment process:

Only clear, odorless liquid from the tank farms and loading rack is allowed into the neutralization tank. If other than clear or odorless, the rainwater goes to the clarifiers located in the Paper plant. The collected rainwater is also check for pH, with adjustments made prior to discharge. This occurs in a batch fashion. Needed data is recorded for each discharge on a log sheet.



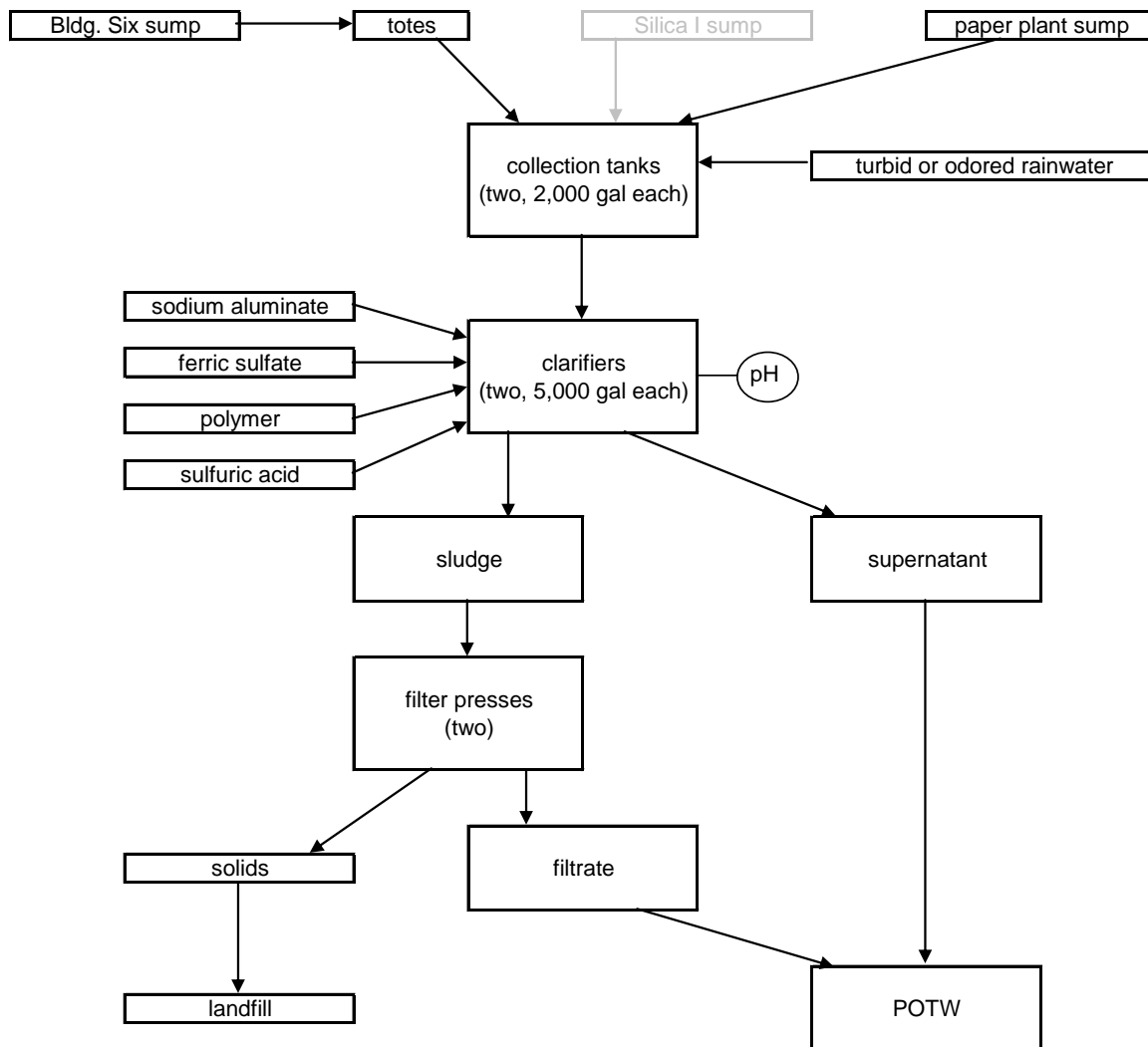
Paper plant wastewater flow diagram

Production process:

The paper plant produces a variety of cold and hot blends. These consists of defoamers, felt washers, deinkers and sodium aluminate. Between batches of products, mix vessels and some transfer lines are rinsed out to ensure cleanliness for the next batch.

Wastewater treatment process:

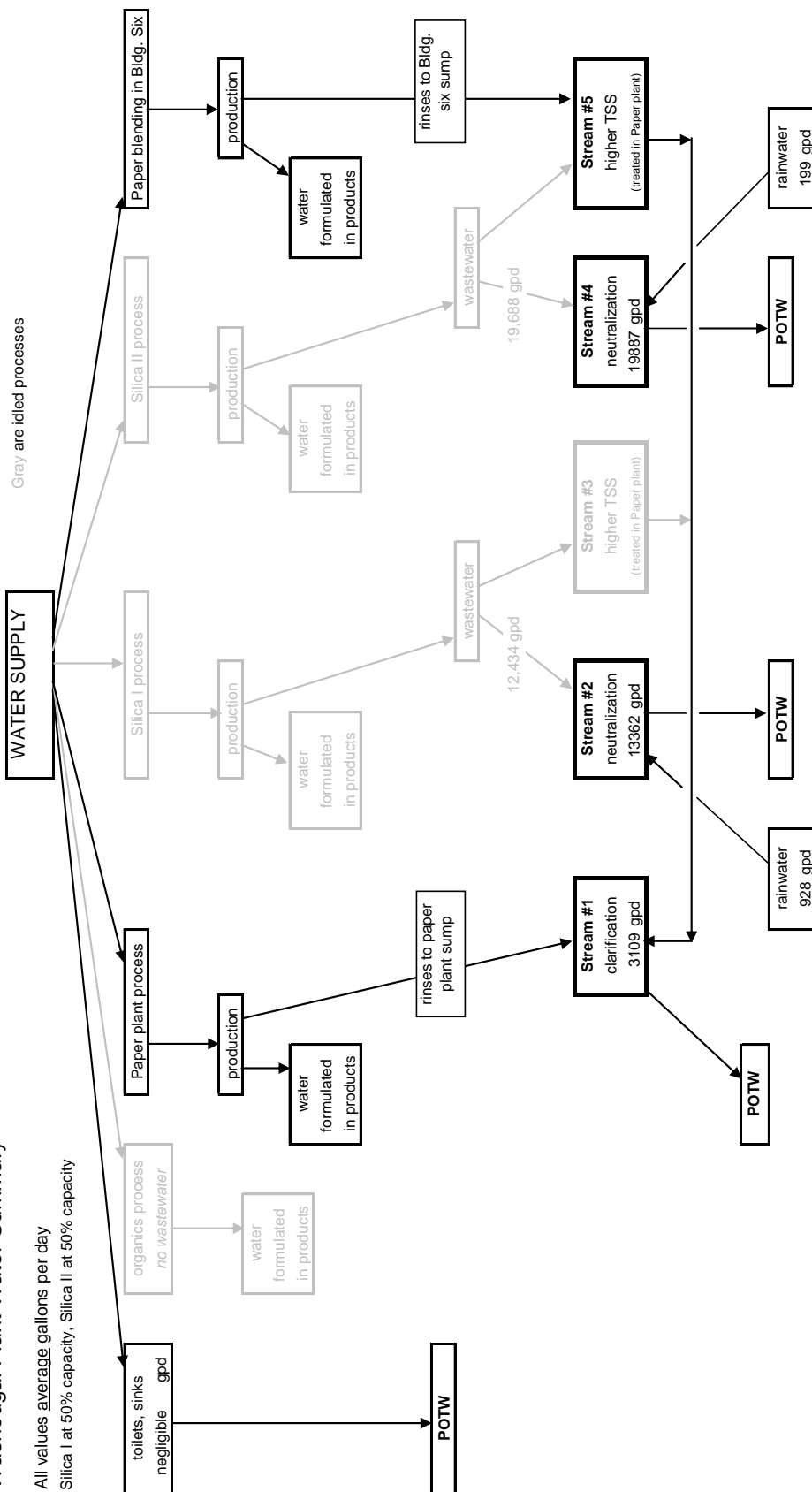
Rinses from the paper plant are collected in a dead end sump immediately adjacent to the collection tanks. Some waste from the sumps in Silica I (currently idled) and Bldg. Six are also added to this sump. Once collected, the wastewater is moved to a clarifier, where it is treated with coagulants. The pH is adjusted, then the material is allowed to settle with sludge forming. Once formed, the supernatant above the sludge is drawn off to the sewer. The remaining sludge is filter pressed, with the filtrate going to the sewer and the remaining solids going to landfill.



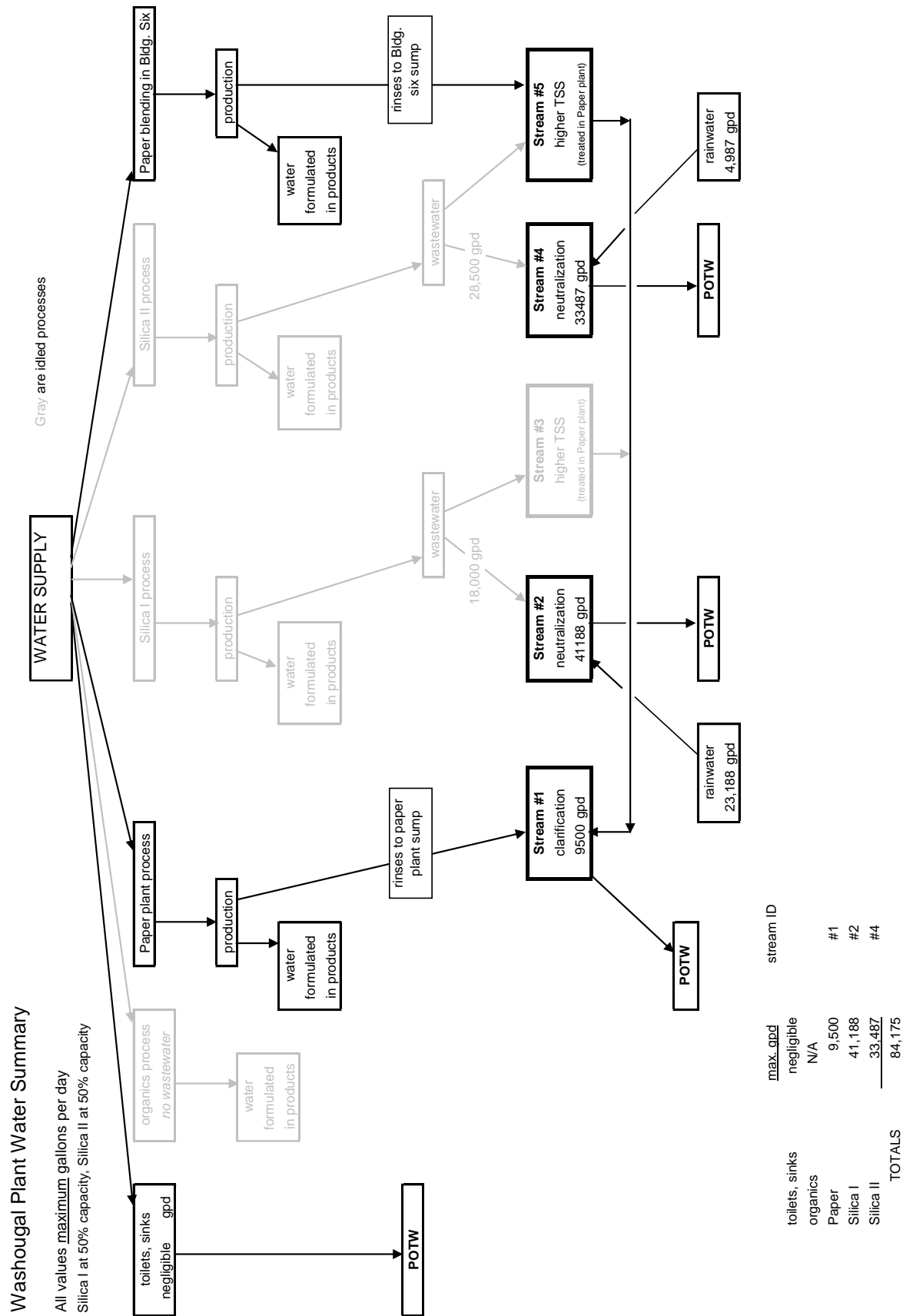
Washougal Plant Water Summary

All values average gallons per day

Silica I at 50% capacity, Silica II at 50% capacity



	ave. gpd	negligible	stream ID
toilets, sinks			
organics	N/A		
Paper	3,109		#1
Silica I	13,362		#2
Silica II	19,887		#4
TOTALS	36,358		



APPENDIX C – RESPONSE TO COMMENTS

No comments were received by Ecology.